

Housing: more than a symptom but less than a cause

Comments on “Housing, the NZ Business Cycle and Macro Imbalances”

(presentation by Peter Jarrett)

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Peter Jarrett and Calista Cheung have given us a very interesting presentation this morning on some of the data and issues relevant to how we should think about the place of housing in the story of New Zealand’s economic imbalances and its sustained relatively poor economic performance. It builds on work on housing undertaken for, and reported in, the recent biennial OECD Economic Survey of New Zealand, and does so by drawing on the OECD’s rich cross-country databases and the associated research. I look forward to having the full paper in due course.

The presentation is a significant step forward in the New Zealand discussion of these issues. There is no hint in the presentation of the oft-heard line that NZers “over-invest in housing”. The straw man of a capital gains tax was also absent, and that to the extent that the tax treatment of housing was mentioned it was consciously placed in the longer-term structural context, recognizing the implausibility of the idea that the tax treatment of housing played a large part in the last decade’s cyclical housing story.² If anything, the material in the presentation might be taken as suggesting (as the 2025 Taskforce did) that NZ has, in some sense, too few houses not too many).

¹ Given at the Treasury/Reserve Bank/ VUW conference on macroeconomic imbalances held in Wellington 23-24 June 2011. Views expressed are those of the author and should not be attributed to the Reserve Bank of New Zealand.

² Increased tax rates (known 2-3 years before the boom got underway), especially in combination with the change in the inflation target in late 2002, may have played some role as an amplifier. However, absent supply constraints, these effects in principle should affect only the unimproved land component. Moreover, there were tax changes running in the other direction, including the reduction in depreciation allowances in 2005 and the introduction of the PIE regime (which in practice treated rental housing less favourably than most alternative investment options). Taking a longer perspective, changes in tax provisions/rates and in inflation were much larger over previous decades and no other surge in prices was as large as this one.

The presentation rightly draws our attention back to supply conditions in the housing market. It also does a service by putting the migration issue back on the table, following in the footsteps of the Savings Working Group's report earlier this year.

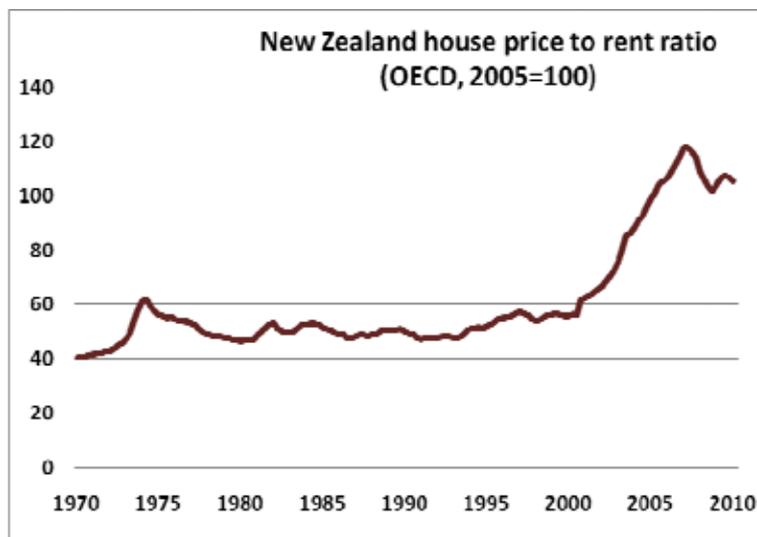
In my time this morning, I will offer some comments and suggestions on Peter's presentation. But I also want to try reframe some of the issues, in ways that put less emphasis on housing per se in thinking about the vulnerabilities and more deep-seated challenges for the NZ economy:

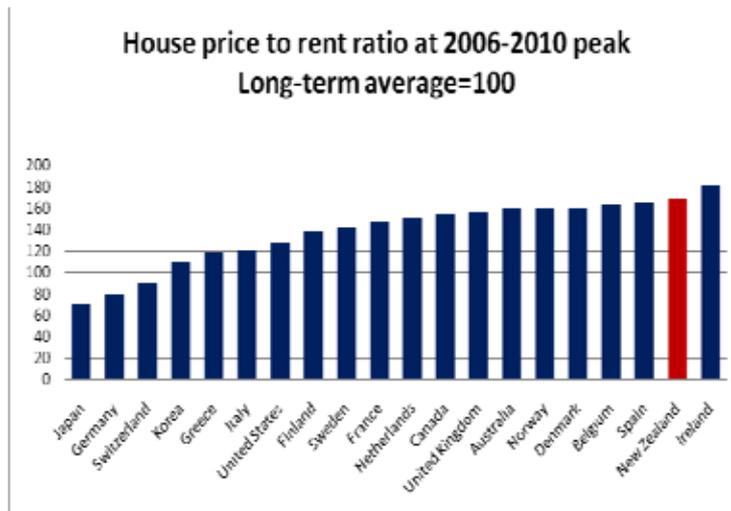
- The large and still widening gap between productivity levels in NZ and the rest of the advanced world
- The persistently high gap between NZ and world interest rates
- The failure of the real exchange rate to adjust, in a trend sense, to the decades-long decline in our relative economic performance.
- A high degree of leverage, both domestically and externally

These issues mostly faced us pretty starkly a decade ago, when there was no hint of a big housing boom just around the corner.

The latest house price boom

One of Peter's early slides made the simple point that NZ had one of the largest house price increases in the OECD over the last decade - and probably the biggest in New Zealand history.



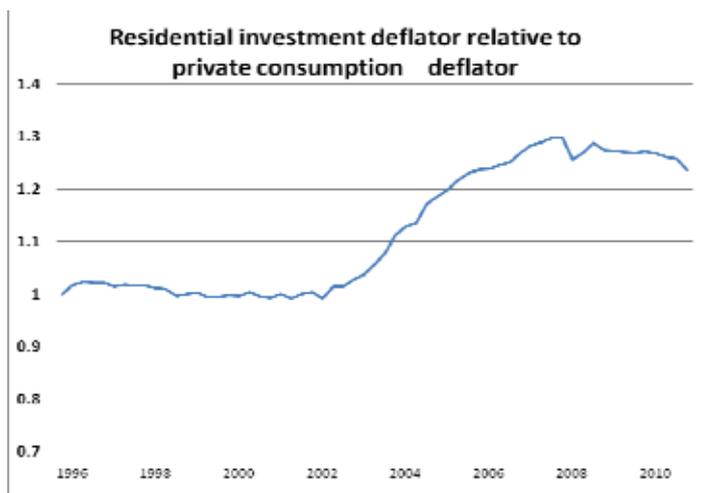
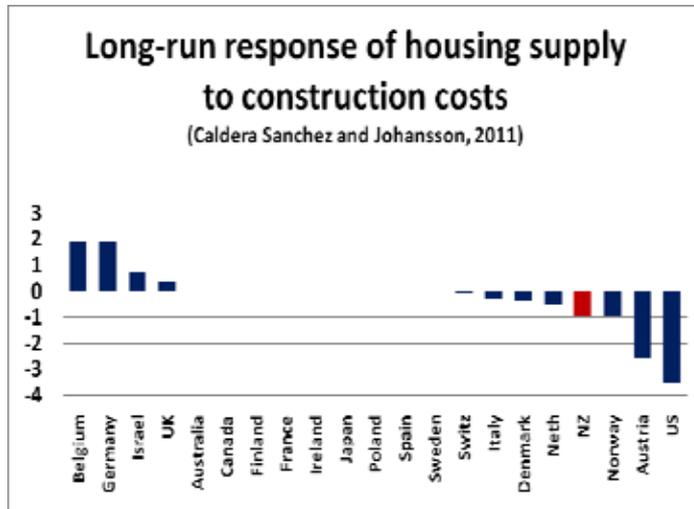


Starting points do complicate things - our boom started later than some - but whichever way one looks at it the picture it doesn't change much. I like looking at the OECD's data on price to rent and price to income ratios, and I'd credit Spain and Ireland with the biggest housing booms. But since those countries had no national monetary policy, and with one eye on the aftermath in each of them, that isn't much consolation when thinking about NZ.

Looking at the data today, and thinking back to being involved in monetary policy back then, I think there is little real doubt that the major precipitating factor was the huge **swing** upwards in net migration earlier in the decade (at a time when monetary policy was probably looser than it should have been). Net migration appears to be more variable in NZ than in most advanced countries, and at the peak in 2003 total net migration was adding 2% a year to our population, from net outflows only a couple of years earlier. And, of course, as Peter notes, the rate of natural population increase in NZ is among the highest in the OECD. Overall, taking the last 20 years together, NZ has had the second highest rate of population growth in the OECD. That inevitably tests housing and construction markets and Peter presents some results suggesting ours wasn't really fit for purpose.

The research results appear to suggest that there isn't anything very unusual in the responsiveness of housing supply to the price of housing in New Zealand: in the long-run equation Peter reports that the coefficient is exactly the same for NZ as for the OECD as a whole, and much better than in many countries. On the other hand,

what doesn't get much attention is that in the same estimation, New Zealand comes out as having a much higher (negative) response of housing supply to rises in construction costs than in almost any other OECD countries.



Unfortunately one of the features of the last decade was a large increase in real price of construction (this is actual building costs; not land prices). And given that, at least in NZ, construction costs and house prices have tended to move together, I'm probably less confident than the authors are in the way housing supply responds to meet demand pressures.

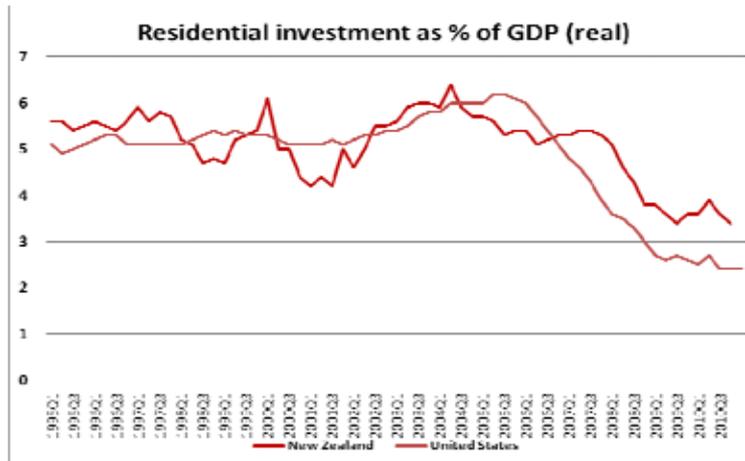
I'm going to pass over quickly the interesting material on tenant-landlord regulation: it doesn't sound right, especially in view of the size and rapid growth of the private

rental market, but I haven't had time to look into the construction of the index and its suggestion that regulation may impede the willingness of the New Zealand private sector to provide rental properties.

Peter notes that although “a considerable part of NZ’s surface area is essentially uninhabitable” there should be plenty of land available. Indeed there should – Ministry for the Environment data show that only 0.7% of NZ’s land is urban. But in practice the situation isn’t that simple, and I think Peter underplays the importance of the whole issue. He seems to focus only on metropolitan urban limits, such as the one that exists around greater Auckland. But zoning (and the rules, and the application of those rules, on what can be done even within land zoned residential) is a pervasive issue. Arthur Grimes’s work compellingly highlighted the importance of the MUL on the fringes of Auckland, but in all other local authority areas decisions to zone land as residential are discretionary, and the yawning disparity between urban land prices and rural land prices near cities points to the significance of the issue. At a Bank-Treasury sponsored forum in 2007, a senior planning official noted that most of the residential-zoned land around greater Wellington was owned by 4 groups, who tightly managed the release of land. The regulatory environment (capital value rating and limitations on the unwillingness of councils to zone new land for residential purposes) meant that the owners of that land appeared to be acting quite rationally to maximize their expected returns, given the quasi-monopoly right laws had granted them - at the cost of artificially high section prices. In its first report, the 2025 Taskforce touched on these issues, and recommended that:

When determining the zoning of land for residential purposes, local authorities should be required by statute to take explicit account of any differences between the price of residential-zoned undeveloped land and the price of other undeveloped land in similar areas. These differences should be reported on by local authorities each year, with a strong presumption that scarcity of zoned land, as reflected primarily in price differences, should prompt action to increase the supply of residential land (recommendation 27).

These things matter much less in advanced countries with fairly static populations (and there are increasing numbers of them). But if we are going to continue to run, as a matter of policy, one of the fastest rates of population growth, and still try to close the yawning income gaps, we need to have policy regimes that are fit for purpose.



Things are rarely 100 per cent clear-cut. I find it salutary that the residential investment shares of GDP in NZ and the US over the decade prior to the recession were almost identical, as were population growth rates during the period - in their case, with real interest rates 350bps lower than those in New Zealand. Just think what demand for housing would have been like in New Zealand at those average interest rates. In aggregate at least, there haven't been many suggestions that the US lacked housing supply in recent years. Perhaps this reinforces the work of authors such as Glaeser and Huang and Tang suggesting that in the longer-term tighter land use restrictions lead not just to bigger booms but also to nastier busts.

But what role did house prices then play in New Zealand's imbalance during this period?

Peter argues what is a fairly common story (we at the RB have certainly run it): the "housing boom private debt-fuelled consumption" story. And the regression results in the paper appear to support such a story. I think there is reason for being cautious about that story, for several reasons.

First, it is worth noting that when the IMF tried a similar exercise a few months ago, looking at private savings rather than household savings, they tried with all their might but failed to find a role for house prices in explaining NZ savings behavior. I will leave the reconciliation of that one to the researchers, but I'm not convinced we have yet got a fully convincing story. Certainly with inflation at conventional world rates (and simply back to where it was in the 1960s), and incomes lagging behind the world, I don't think those items in the model very compellingly explain New Zealand's relatively low saving rate.

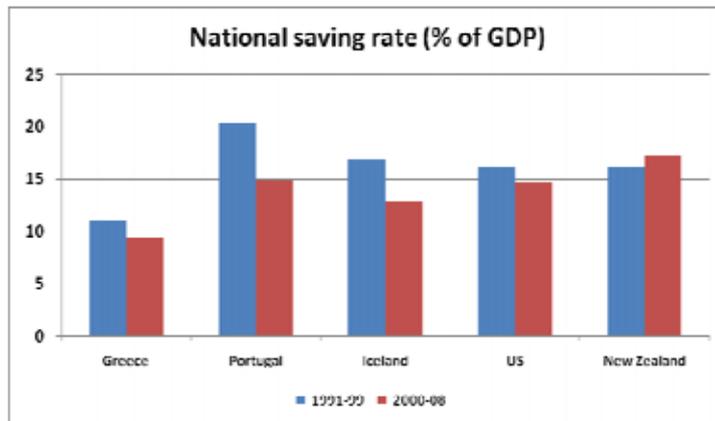
Second, increased house prices are not additional real wealth for the economy as whole. That doesn't mean that people weren't consuming on their misplaced beliefs about their wealth or the value of their collateral. But equally there was a lot else going on. The labour market was extremely tight during the last decade, and market incomes were rising reasonably rapidly. We don't have data on income expectations, but it wouldn't be surprising if rising perceptions of future permanent incomes (perhaps also misplaced) had also played a part in supporting consumption.

Third, as Peter usefully pointed out - and I had not noticed before - on the new revised household savings data, the New Zealand household savings rate actually troughed in the year to March **2003**: before the fastest rates of **increase** in house prices, and years before the peak **level** of real house prices.

Fourth, the OECD modeling uses the OECD's measure of the **structural** fiscal balance as an explanatory factor in household savings behavior. That makes sense, or would.....except that when I checked yesterday the OECD still estimates that almost all the fiscal surpluses in the middle of the last decade were "structural", whereas it is increasingly clear that they were not. Putting in more realistic structural balance estimates would further worsen the extent to which the model can explain household savings behavior during the housing boom.

Fifth, for many purposes, it is national savings that matter. I dug out the summary table of gross national saving rates in the latest OECD Outlook, with data back to 1991. What was striking was the absence of any real trend in NZ national savings rates over the last two decades. NZ's national savings rate is a bit lower than the

OECD average (although some corrections need to be made for the numbers to be truly internationally comparable), but actually, our national savings rate in the 2000 to 2008 period was **higher** than in the previous sub-period. Savings rates fell in Iceland, Greece, Portugal, the US and even the UK, but they rose a little here.



Sixth, it is worth remembering that nominal consumption spending as a share of GDP behaved (levels and changes) pretty much as it did in the previous period of excess pressure on resources in the mid 1990s.

And, finally for now, as one of Peter's charts showed, the really striking movement in savings rate during the period of intense boom in the last decade was the decline in **business** savings late in the boom. I don't claim to fully understand the reasons for that, and we all know that the boundaries between business and household get fuzzy but.....it is consistent with the low share of business fixed investment during the boom, highlighted in one of Peter's graphs, and with the fact that business debt (incl agriculture) rose more rapidly than household debt over the decade.. Over time businesses "save" mainly to fund investment the investment opportunities clearly were not perceived to have been there.

So where does this take me?

It clearly does not mean that our high house prices - and the associated gross stock of debt built up to take on the new more highly priced stock - is irrelevant to an assessment of New Zealand's vulnerabilities. They matter: distribution matters. If real house prices went right back to 2002 levels, there would be a great deal of debt

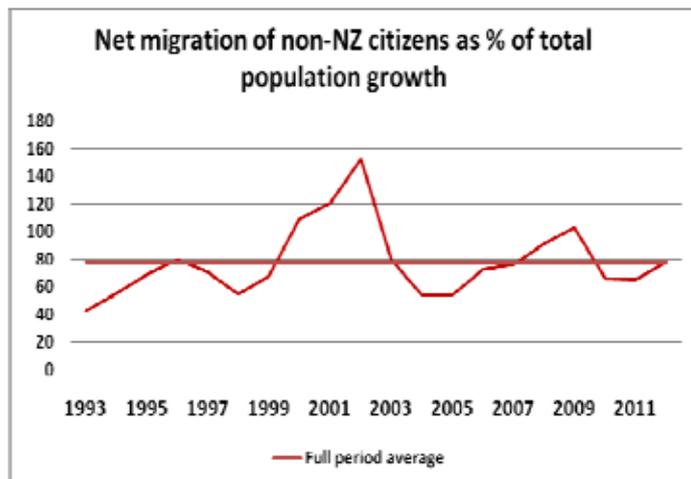
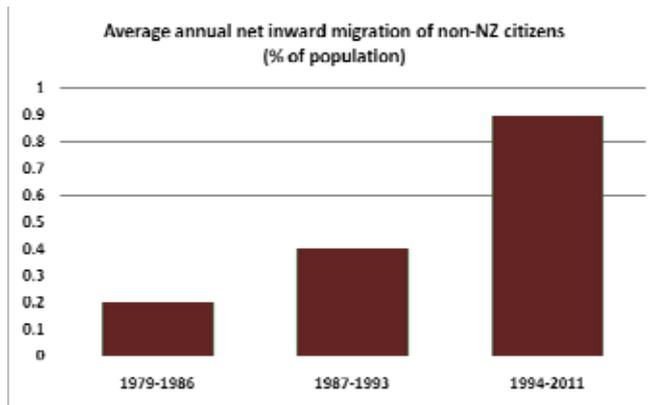
still outstanding that had been taken on at 2007-2011 prices. The fact that the next generation of home-buyers would now find housing materially cheaper is no one for one offset. Distribution matters to lenders as well: loans are asymmetric; one can lose lots of money on bad ones, while making not a cent more than the face value on good ones. Lenders' lenders matter too: so much of the current account deficit (and banks' balance sheets) has continued to be financed through the narrow door of 4 banks by an accumulation of still quite short-term wholesale foreign debt. The heightened vulnerability associated with a sustained period of very high house (and farm) prices would largely exist even if the NIIP had not changed at all as a result of the house price boom.

But my sense is that the nature of New Zealand's vulnerabilities and economic underperformance are rather more longstanding and deep-seated than the specifics of this house price boom. Indeed, I will argue that most of them reflect policy choices.

Recall that I made the point earlier that the US and NZ had similar residential investment shares of GDP during the decade prior to the boom. But we financed ours at 350bps higher than they did theirs. That is a really rather staggering difference, and it has shown no signs of sustainably narrowing at any time in the last 20 years. Why did we have such high residential investment? Peter implicitly argues - and I agree with him - that it was not about over-investment in housing. If anything new housing supply may have lagged "need" at least on some measures. We needed such a large share of real resources devoted to residential investment because the population was growing rapidly. That was a policy choice.

Peter highlights that we have a relatively high rate of natural increase in population. But we also have a large and persistent outflow of NZers (large by any comparative international standards). That outflow should best be seen as a rational response to perceived opportunities - those abroad are better than those here. Outflows of New Zealanders should generally act as a stabilizing force, helping to rebalance the economy. Economies with slow growing populations need to devote a whole lot smaller proportion of their real resources to simply maintaining the capital stock per worker.

Based solely on the fertility and migration choices of New Zealanders (each presumably behaving fairly rationally), our population growth would have been growing only quite slowly since the mid 1970s. As it is, our population growth since 1990 has been second or third fastest in the OECD. What changed? Migration policy did in the early 1990s.



And 80% of our population growth in the last couple of decades has been the net inflow of non NZ citizens - thus almost purely a matter of discretionary policy choice. Government policy interventions can act to stymie successful adjustment - and I believe this to have been the case in NZ over the last two decades. Our negative NIIP position is larger, our real exchange rate is higher, our real interest rates are higher, and our capital stock per worker (and associated perceived business opportunities) are lower than they would have been if we had simply let the self-stabilising behavior take its course. As John McDermott's slides showed earlier, that adjustment was working prior to the mid 1980s.

Among policy and analytical circles in New Zealand there is a pretty high degree of enthusiasm for high levels of immigration. Some of that stems from the insights of literature on increasing returns to scale. Whatever the general global story, the actual productivity track record here in the wake of very strong inward migration is poor. In an Australian context, the Productivity Commission – hardly a hot-bed of xenophobia or populism - concluded that any benefits from migration to Australia were captured by migrants and there were few or no discernible economic benefits to Australians. And that was in a country already rich and successful and with materially higher national saving and domestic investment rates than those in NZ.

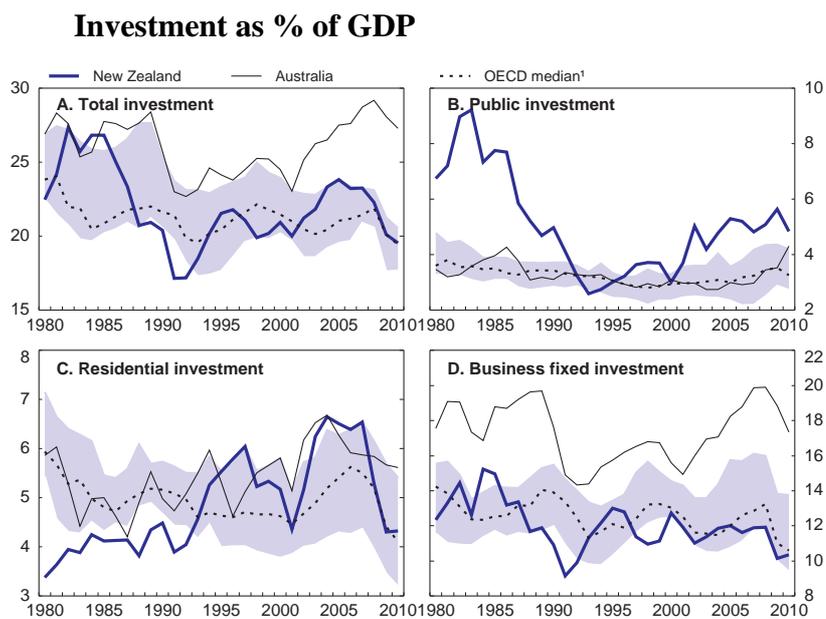
But very little of the global discussion of migration has factored in the sort of **specific** circumstances New Zealand has found itself in. With relatively low national savings rates, and with a relatively well-educated and skilled domestic workforce, it isn't obvious that applying a lot more labour to the situation was the route to success in trying to reverse decades of relative economic decline (a very different situation say from Singapore with lots of savings, bringing in people to utilize that domestic resource)

Labour typically needs capital – houses, roads, factories, shops, offices – and it has long been recognized that the demand effects of new labour outweigh the supply effects for the initial period. But we have had not just one wave of new labour, but repeated waves of new labour, with the numbers if anything generally tending to trend upwards. Real non-tradables labour and resources need to be used to build the new capital stock. That will have required the OCR (and the domestic interest rate) to be higher than otherwise throughout the last two decades.

I don't have time for an extended discussion of the competing hypotheses of why NZ interest rates have been so high. For that I refer the reader to the Vowles and Labuschagne Treasury working paper that I had some involvement with. Suffice to say that widening current account deficits and increasing voluntary private leverage are not usually phenomena that follow when the world markets impose a risk premium on the domestic cost of credit. We do these interest rates to ourselves.

Those high real interest rates will have helped contribute to the sustained relatively high exchange rate - and in particular, the failure since the mid 1980s of the real exchange rate to adjust into line with the deterioration in New Zealand's relative productivity performance (even allowing for the terms of trade). Those high real interest rates and high real exchange rate will have choked off investment projects, especially in the tradables sector, which would otherwise have been profitable. The Savings Working Group report quoted some rough estimates I was involved in putting together, which suggested that if net immigration had been kept to 1980s levels, the NIIP position might be 20 percentage points smaller than it actually is (and real house prices would almost certainly have been lower).

People have to live somewhere, and so when we look at the last decade, the surge in investment (for it is the investment share that rose markedly not the savings rate that fell) is seen in residential investment (and public investment, much of it related to the underlying public infrastructure a new population demands). At an OECD level, there has been a strong long-term cross-country relationship between the residential investment share of GDP and the rate of population growth - as one would expect. There isn't much sign of excess housing stock (Peter's point) or excess public infrastructure - the rapid population growth rates successive governments chose to pursue, look to have crowded out real business investment.



Source: OECD Survey of New Zealand, 2011

You will notice that business investment as a share of GDP has pretty consistently been around or below the OECD median since the late 1980s. But over that period we have had among the fastest rates of population growth - so we needed **more** investment as a % of GDP than the median OECD country just to maintain capital stock per worker. Peter's team sent me the national data underlying this chart: when I plotted it there was basically no relationship between the business investment share of GDP and the rate of population growth, suggesting that all else equal rapid population growth crowds out capital deepening. At very least that seems to have been the case here.

When a family falls on hard times, and has to devote lots of energy to stabilizing the situation, and then decides to have another child (whatever the other merits of the case) that will almost invariably worsen the family's economic position. It is a folksy comparison and breaks down at some points, but NZ is in some respects that family: choosing to have lots more kids, as it were, just when were in a position to capitalize on the good positioning reforms put in place by successive governments in the late 1980s and early 1990s. In that story, housing is more than a symptom but less than a cause.